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CalESCO

CALIFORNIA EARTH SCIENCE CORPORATION

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May 5, 1975

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Contract NAS 2-7698
MONTHLY PROGRESS REPORT NO. 23
April 1975

Fault Tectonics and Earthquake Hazards in the Peninsular Ranges, Southern California, EREP Investigation 463

NASA-Lyndon B. Johnson Space Center Technical Support Procurement Branch Houston, Texas 77058

Attention: Mrs. Ruth Elder, Mail Stop BB631 (B9)

Dear Mrs. Elder:

California Earth Science Corporation (CalESCO) is pleased to submit its 23rd Monthly Progress Report on the application of Skylab imagery to analysis of fault tectonics and earthquake hazards in the Peninsular Ranges, Southern California under NASA Contract No. NAS 2-7698.

Summary Outlook

The principal plans for the immediate future are to continue analysis of images from SL1/SL2, SL3, and SL4.

Significant Progress

- 1. Images of SL2 EREP rass 2 S192 channels were generated. Six channels are usable.
- 2. The summary of a paper describing our analysis of pseudocolor transformations was submitted to the 10th Symposium on Remote Sensing of Environment.
- 3. Dr. David Amsbury visited with us in early April. One day was spent in the field examining faults in the Peninsular Ranges discovered during this investigation. A portion of a second day was spent at the JPL Image Processing Laboratory and in our office discussing results and problems connected with the study.

(E75-10284) FAULT TECTONICS AND EARTHQUAKE N75-24057 HAZARDS IN THE PENISULAR PANGES, SOUTHERN CALIFORNIA Monthly Progress Report, Apr. 1975 (California Earth Science Corp., Santa Unclas Monica.) 2 p HC \$3.25 CSCL 08G G3/43 00284

- 4. Analysis of SL4 photos of the Mojave Desert were continued. An overflight was made along several active faults. A number of topographic indicators of recent faulting are identifiable in Skylat phot;s, particularly 1908 photos.
- 5. A test was performed involving a number of RAND employees to determine if pseudocolor transformations improve the ability to read gray-scale charts. Results of the test are being evaluated.

Expected Accomplishments, Current Month

- 1. Most of May will be spent preparing the paper, "Active and Inactive Faults of Southern California Viewed from Skylab" for submission to the Earth Resources Symposium.
- 2. Subtractions and combinations of S192 images of the western Mojava Desert will be prepared.

Travel Summary and Plans

Two days will be spent in the field in western San Diego County.

Very truly yours,

Paul M. Merifield

Principal Investigator

CALIFORNIA EARTH SCIENCE CORP.

cc: NASA

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